

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A resin molding device for molding a resin molded product by injecting a molten resin into a cavity of a metal mold followed by solidification, which device comprises:

a metal mold with a cavity; and

an outside air inlet part formed in said metal mold and opened to an optional part of said cavity to allow the outside of said metal mold to communicate with an interior of said cavity, and a stepped part formed at an inner wall of said cavity of said metal mold orthogonally to the flowing direction of said molten resin injected into the cavity, an opening of said outside air inlet part to the cavity being opened at a portion of said stepped portion other than a transfer face of the cavity, said stepped part formed having a plurality of continuous steps.

Claim 2 (Canceled).

Claim 3 (Previously Presented): A resin molding device according to claim 1 wherein said outside air inlet part is formed in said stepped part or the boundary of steps of the stepped part.

Claim 4 (Canceled).

Claim 5 (Currently Amended): A resin molding device according to claim 1 wherein ~~said stepped part is formed so as to have a plurality of continuous steps, and~~ said outside air inlet part is formed in the state communicating with said cavity in the area between the steps.

Claim 6 (Previously Presented): A resin molding device according to claim 1 further comprising:

a gas feeding means for forcedly feeding a prescribed gas to said outside air inlet part to feed said gas into said cavity through said outside air inlet part by said gas feeding means during and after the injection of said molten resin into said cavity.

Claim 7 (Previously Presented): A resin molding device according to claim 1 further comprising:

a gas feeding means for forcedly feeding a prescribed gas to said outside air inlet part to feed said gas into said cavity through said outside air inlet part by said gas feeding means after the injection of said molten resin into said cavity.

Claims 8-17 (Canceled).

Claim 18 (Previously Presented): A resin molding device according to claim 1, wherein said outside air inlet part is a slit.

Claim 19 (Previously Presented): A resin molding device according to claim 1, wherein $s \geq t/10$, wherein s is a step length of said stepped part and t is a thickness of said molded product.

Claim 20 (Previously Presented): A resin molding device according to claim 1, wherein said outside air inlet part comprises at least one of: a porous member, at least one fine slit, at least one clearance, or a movable member.

Claim 21 (Previously Presented): A resin molding device according to claim 1, wherein said outside air inlet part is formed in a direction where said molten resin crosses over said outside air inlet part during entry of said molten resin into said cavity.

Claim 22 (Previously Presented) A resin molding device according to claim 18, wherein said slit is formed having a width of about 1 to 30 μm in a direction where said molten resin crosses over said slit during entry of said molten resin into said cavity.

Claim 23 (Previously Presented): A resin molding device according to claim 18, wherein said slit is formed in a circumferential direction where said molten resin crosses over said slit during entry of said molten resin into said cavity.

Claim 24 (Previously Presented): A resin molding device according to claim 1, wherein said cavity has an opening diameter increasing at said stepped part as a boundary to change said molded product from a thinner part to a thicker part.

Claim 25 (Previously Presented): A resin molding device according to claim 1, wherein said cavity is changed from a small opening diameter to a large opening diameter in said stepped part as a boundary to change said molded product from a thinner part to a thicker part.

Claim 26 (Previously Presented): A resin molding device according to claim 1, wherein a recessed part is formed in a surface of said cavity of said resin molding metal mold between said outside air inlet part and a transfer face so as to form a protruding projection or rib on said molded product.

Claim 27 (Previously Presented): A resin molding device according to claim 18, wherein a gas feeding machine is connected to said slit to introduce a prescribed gas into said cavity through said slit.

Claim 28 (Previously Presented): A resin molding device according to claim 27, wherein said gas introduced by said gas feeding machine has a pressure of about 1 to 6 kgf/cm².

Claim 29 (Currently Amended): A resin molding device according to claim 1, wherein said outside air inlet part is formed in a portion of the metal mold having ~~has~~ a unitary structure, such that said outside air inlet part is in constant flow communication with said cavity, without a movement of a moving part of said metal mold.